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APPARATUS AND METHOD FOR MAT PROTECTION OF
NON-THERMAL PLASMA REACTOR

ABSTRACT

A non-thermal plasma reactor is provided. The non-thermal plasma reactor includes a plasma-generating substrate, a housing and a mat.

- 5 The plasma-generating substrate has one or more flow paths for an exhaust gas. The housing has an inlet and an outlet. The mat retains the plasma-generating substrate in the housing such that the one or more flow paths are in fluid communication with the inlet and the outlet. A voltage is supplied to the plasma-generating substrate to generate a plasma field. An electrically
- 10 insulating layer is disposed between the plasma-generating substrate and the housing for preventing an arc of electricity from the plasma-generating substrate and/or the voltage to the housing.